IN THE CLAIMS:

Please cancel Claims 14-26, without prejudice or disclaimer of subject matter.

Please amend Claims 1-6 and 8-13, and add new Claim 27, as indicated below. The following is a complete listing of claims and replaces all prior versions and listings of claims in the present application:

Claim 1 (currently amended): A photoelectric conversion device comprising:

a plurality of photoelectric conversion regions, each photoelectric conversion region having a first semiconductor region for accumulating electric charges that correspond to incident light;

a plurality of electrodes, each electrode being arranged at a side of a corresponding first semiconductor region for transferring a signal charge from said first semiconductor region; and

a plurality of amplifying field effect transistors ~~into which a~~, each field effect transistor receiving a signal charge from [[said]] a corresponding photoelectric conversion ~~regions is~~ region inputted by a corresponding electrode, wherein:

each first semiconductor region is surrounded by a potential barrier region,

a nick region is formed in a part of [[said]] each potential barrier region and is arranged at a side different from a side at which a corresponding electrode is arranged, and

a source or drain region of each field effect transistor is placed adjacent to [[said]] a corresponding nick region, said source or drain region having [[the]] a same conductivity type as a conductivity type of said first semiconductor ~~region~~ regions.

Claim 2 (currently amended): A photoelectric conversion device according to claim 1, wherein [[said]] each potential barrier region includes at least a selectively oxidized film and a channel stopping layer directly below said selectively oxidized film.

Claim 3 (currently amended): A photoelectric conversion device according to claim 1, wherein [[said]] each potential barrier region includes at least a buried isolation region whose conductivity type is opposite to [[that]] said conductivity type of said first semiconductor regions.

Claim 4 (currently amended): A photoelectric conversion device according to claim 1, wherein each first semiconductor region is formed in a low impurity concentration region that is doped with an impurity of [[the]] a same conductivity type as said conductivity type of said first semiconductor regions ~~in a~~ at an impurity concentration lower than [[the]] an impurity concentration of said first semiconductor regions.

Claim 5 (currently amended): A photoelectric conversion device according to claim 4, wherein a buried isolation region whose conductivity type is opposite to [[the]] said conductivity type of said first semiconductor regions is formed below each field effect transistor, respectively.

Claim 6 (currently amended): A photoelectric conversion device according to claim 5,

wherein said buried isolation region ~~placed below each field effect transistor~~ surrounds a region larger than [[each]] a first semiconductor region, and

wherein [[the]] said region surrounded by [[the]] said buried isolation region

functions as a photosensitive region.

Claim 7 (canceled).

Claim 8 (currently amended): A photoelectric conversion device according to claim 5, wherein [[said]] each buried isolation region is ~~placed~~ respectively positioned at least [[a]] in part in an area below ~~said one main electrode~~ a source or drain region of [[each]] a corresponding field effect transistor.

Claim 9 (currently amended): A photoelectric conversion device according to claim 1,

wherein [[said]] each potential barrier region includes at least a semiconductor region whose conductivity type is opposite to [[the]] said conductivity type of said first semiconductor regions, and

wherein a buried region that is doped with an impurity of [[the]] a same conductivity type as said conductivity type of said semiconductor ~~region in a~~ regions at an impurity concentration lower than [[the]] an impurity concentration of said semiconductor ~~region~~ regions is placed in [[said]] each nick region.

Claim 10 (currently amended): A photoelectric conversion device according to claim 4, wherein [[the]] said low impurity concentration region is one of a semiconductor substrate, an epitaxial layer, and a well.

Claim 11 (currently amended): A photoelectric conversion device according to claim 1, wherein ~~said one main electrode~~ each source or drain region is connected to a fixed electric potential or a similar electric potential.

Claim 12 (currently amended): A photoelectric conversion device according to claim 1, wherein a semiconductor region whose conductivity type is opposite to [[the]] a conductivity type of said plurality of photoelectric conversion regions is ~~placed~~ positioned below each of said first semiconductor regions, respectively.

Claim 13 (currently amended): ~~An image pick-up system, comprising: a~~ A photoelectric conversion device according to claim 1[[;]], wherein said photoelectric conversion device is part of an image pick-up system that includes:

an optical system for forming an image in said photoelectric conversion device; and

a signal processing circuit for processing a signal outputted from said photoelectric conversion device.

Claims 14-26 (canceled).

Claim 27 (new): A photoelectric conversion device comprising:

a plurality of photoelectric conversion regions, each photoelectric conversion region having a first semiconductor region for accumulating electric charges that correspond to

incident light;

a plurality of electrodes, each electrode being arranged at a side of a corresponding first semiconductor region for transferring a signal charge from said first semiconductor region; and

a plurality of amplifying field effect transistors, each field effect transistor receiving a signal charge from a corresponding photoelectric conversion region inputted by a corresponding electrode, wherein:

each first semiconductor region is surrounded by a potential barrier region, and

a nick region is formed in a part of each potential barrier region, said nick region being arranged between a corresponding first semiconductor region and a source or drain region of a corresponding field effect transistor, and said nick region being arranged at a side different from a side at which a corresponding electrode is arranged, said source or drain region of said corresponding field effect transistor being positioned adjacent to said nick region, and said source or drain region having a same conductivity type as a conductivity type of said first semiconductor regions.